



# The State of the Economy and Prospects for Tax Revenue in Tennessee

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*by*

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# The State of the Economy and Prospects for Tax Revenue in Tennessee

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# The Balance of News

## *Recession Has Not Yet Given Way to Growth*

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### National Bureau of Economic Research

- Set the end of the last expansion at March 2001
- It has not yet concluded that a new expansion is underway

### *Optimism builds for 2003*

- U.S. companies forecast stronger capital spending next year -- *BC 12/10/02*

### *But no clear trend is yet evident*

- This was reflected in FOMC policy decision at its December meeting
  - Its target rate was left unchanged
  - Cited risks to economy as balanced

### *Even so, markets are skittish over earnings*

- U.S. stocks fall, steepest in four weeks, amid concerns over weak spending—*BC 12/10/02*
- The unemployment rate jumped last month

### *Mass layoffs are not over*

- Morgan Stanley cut affects 2000—*FT 11/22/02*
- Job cuts at Sprint—*FT 11/15/02*
- Gloom spreads as CEOs expect more job cuts—*FT 11/13/02*

### *Manufacturing remains stymied*

- Old Purchasing Managers Index remains beneath 50%—*FT 12/3/02*
- Manufacturing component of industrial production fell in the last three months

### *But there is some good news*

- U.S. growth hits 4% in third quarter—*FT 11/27/02*
- Productivity remains strong
- Exports have begun to advance from their low at year-end 2001



# The Balance of News

## *Mixed Picture Emerges Looking Forward*

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### *Problems persist in Europe*

- Europe may shrink in 1<sup>st</sup> quarter for second time in decade—*BC 12/4/02*
- Germany's unemployment climbs—*BC 12/4/02*
- German banks face rise in corporate failures—*FT 12/5/02*
- French economy grows at weakest pace in years—*BC 11/22/02*
- But some data provide a bit of good news to France —*FT 12/2/02*

### *Pacific also sees its share of problems*

- Rising yen threatens Japan's export-led recovery—*FT 12/07-08/02*
- Japanese life insurers' solvency margins slip—*FT 11/27/02*
- Banking worries weigh on Japan—*FT 11/19/02*
- Rumors of China devaluation crushed—*FT 11/26/02*
- China considering restrictions on steel imports—*FT 11/7/02*

- S. Korea business confidence falls—*BC 12/4/02*
- Philippine exports rise at slowest pace since March—*BC 12/4/02*

### *Mass layoffs continue in Europe*

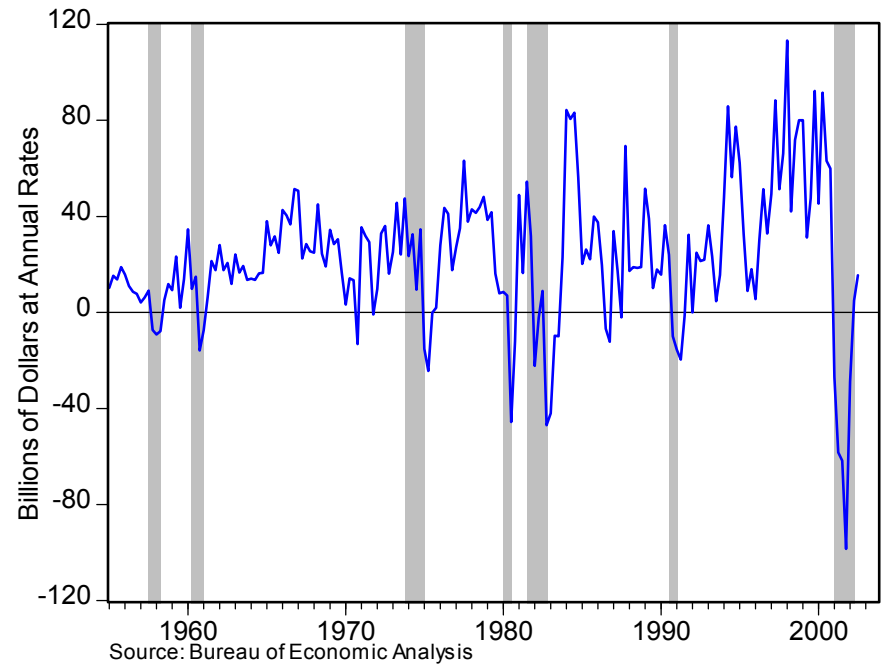
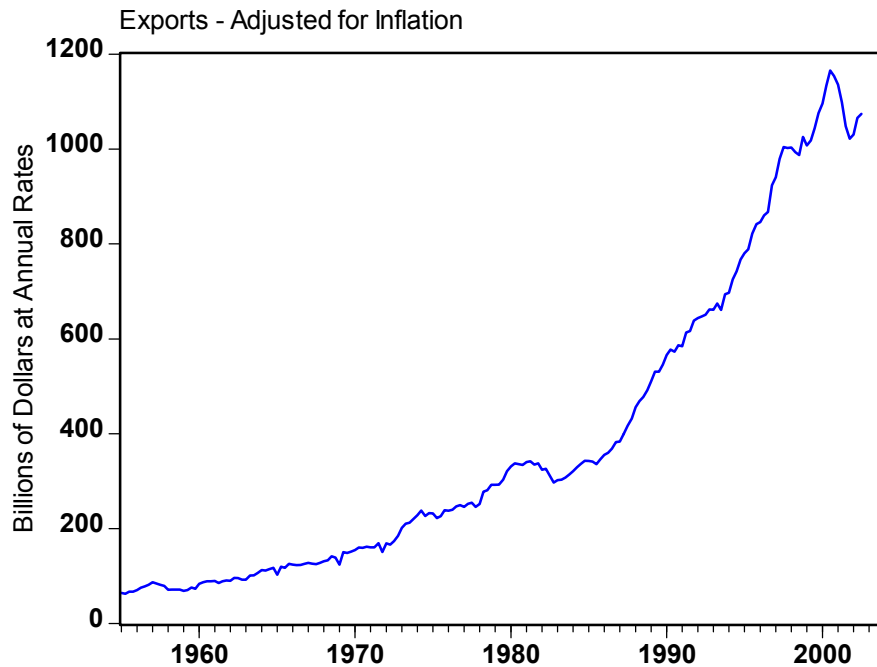
- Dresdner to axe 800 jobs—*FT 12/07-08/02*
- ABN Amro could cut 2,500 more jobs—*FT 11/19/02*
- Job cuts rise at Commerzbank—*FT 11/13/02*
- Job cuts part of RSA restructuring—*FT 11/8/02*

### *This hemisphere*

- Argentina defaults on World Bank loan—*FT 11/15/02*
- Inflation becomes a problem for Brazil—*FT 11/19/02*
- But there is some good news; Argentina eases bank restrictions—*FT 12/3/02*

# The U.S. Cycle in Perspective

## *Exports and Changes in Business Inventories*



# The U.S. Business Cycle in Perspective

## *Collapse in Technology Spending Dominated the Investment Spending Picture*

More than half of equipment and software spending is devoted to information-processing equipment

The rest is spread among industrial equipment, transportation equipment, and other investment spending

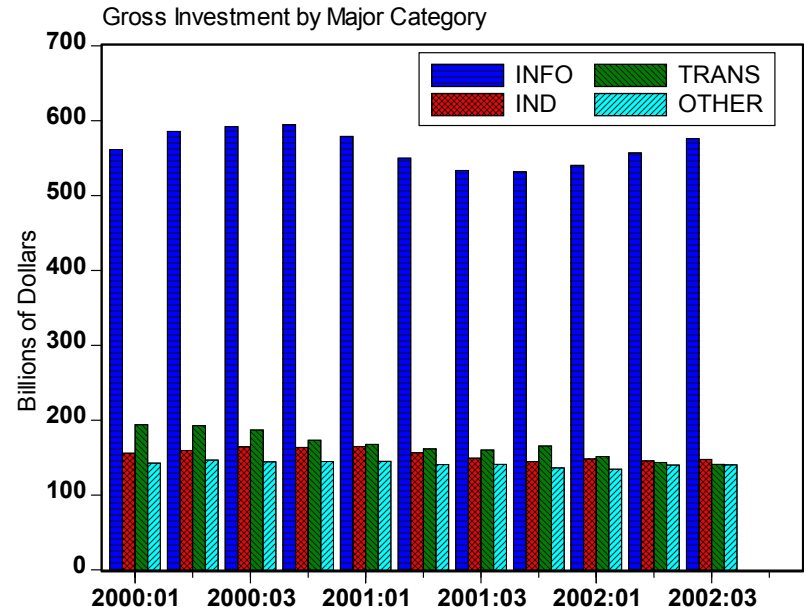
Decline in investment spending was dominated by a fall-off in spending on information-processing equipment

Information processing equipment:

- Computers and peripheral equipment, software, and other spending
- Widespread consensus that technology spending will not quickly rebound

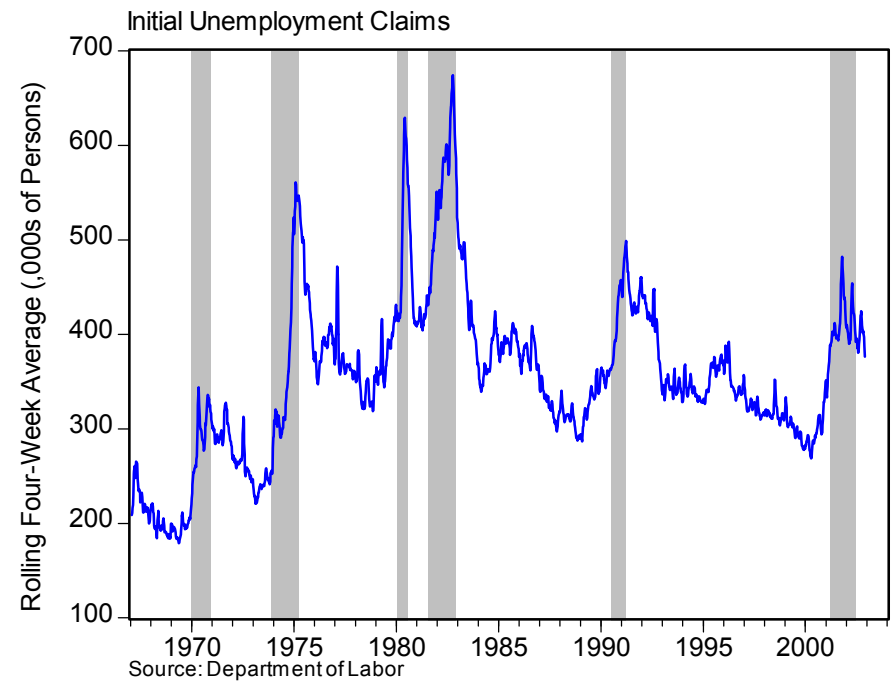
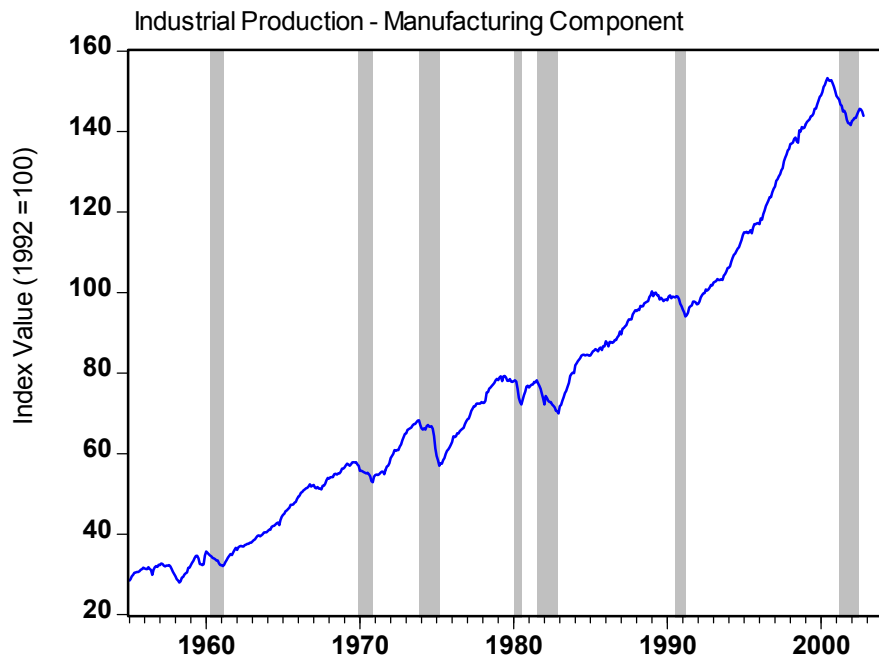
But evidence that the overall sector has begun to improve

Hard goods (the old producer durable equipment) still languishes



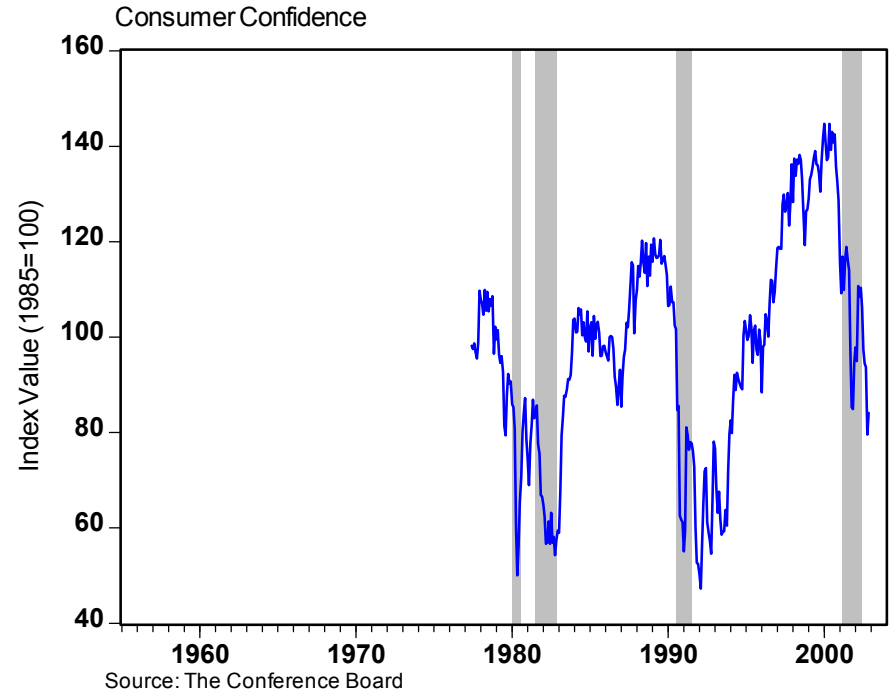
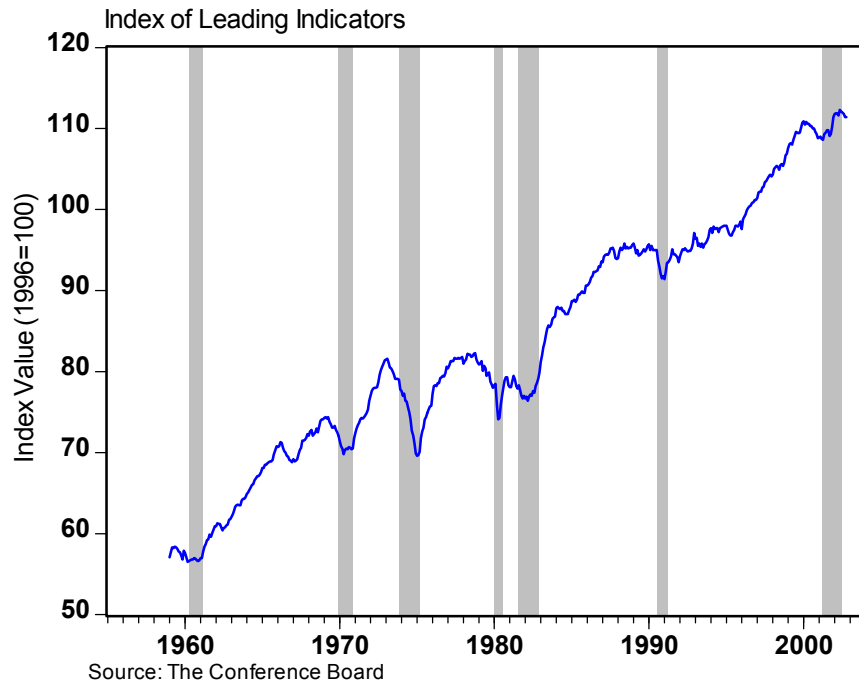
# The U.S. Cycle in Perspective

## *Manufacturing Output and Initial Unemployment Claims*



# The U.S. Cycle in Perspective

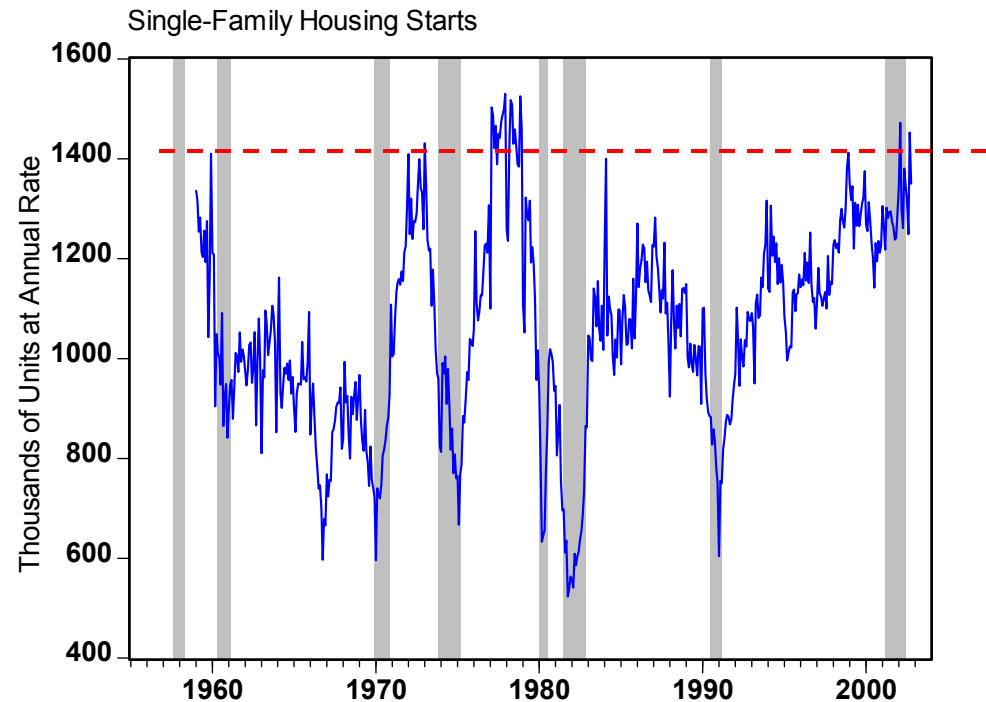
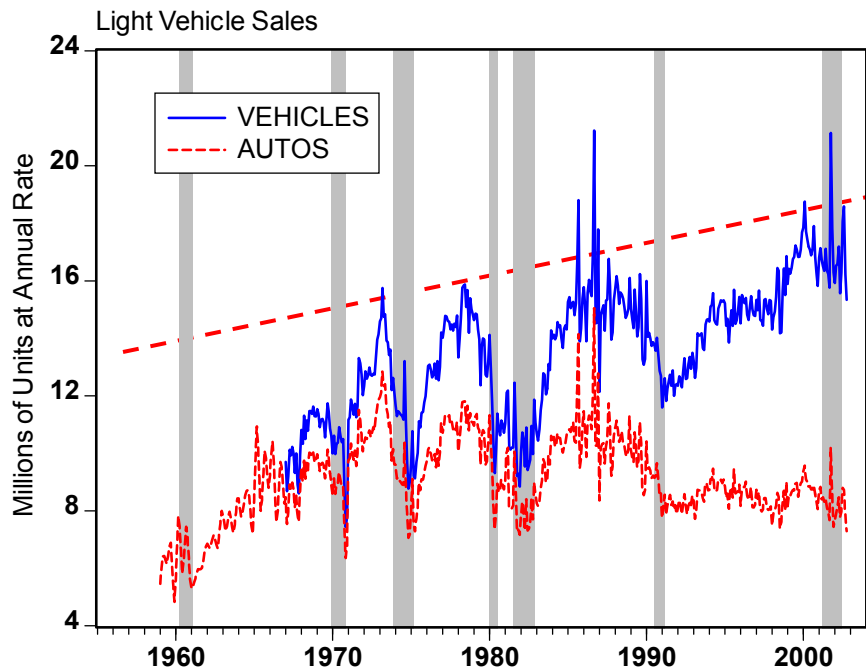
## *Leading Indicators and Consumer Confidence*





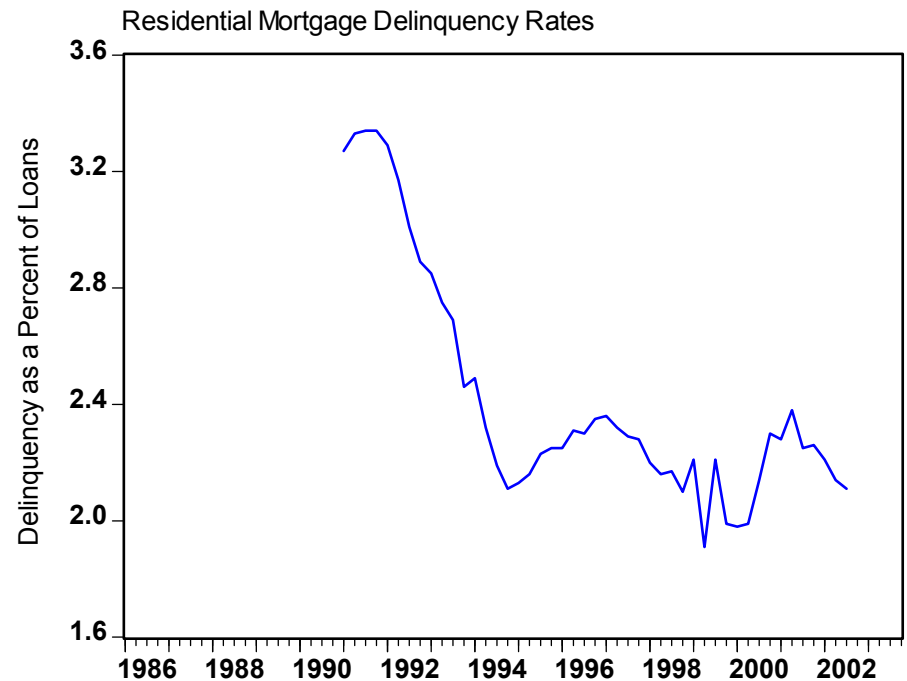
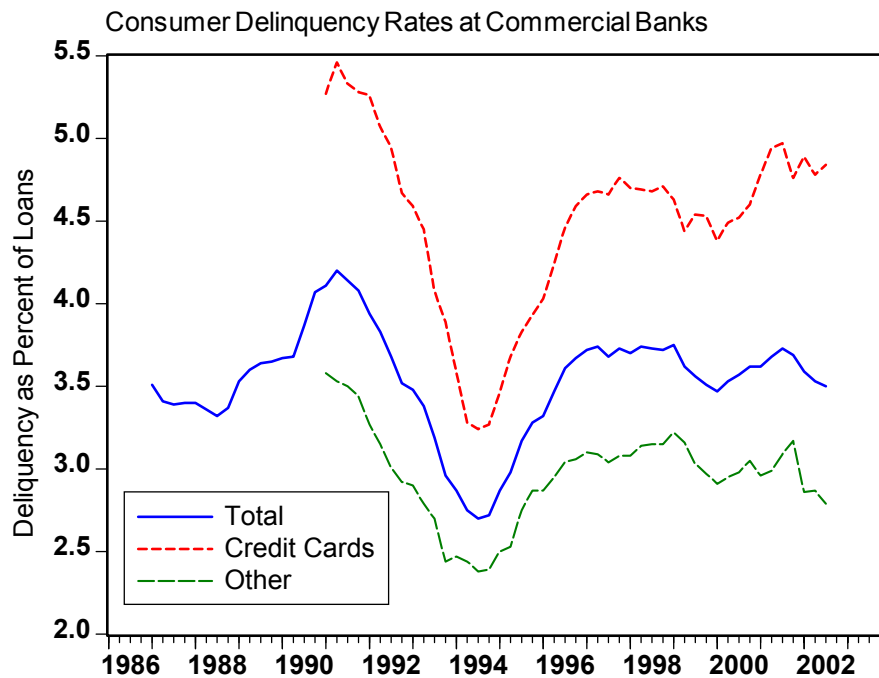
# The U.S. Cycle in Perspective

## *Light Vehicle Sales and Housing*



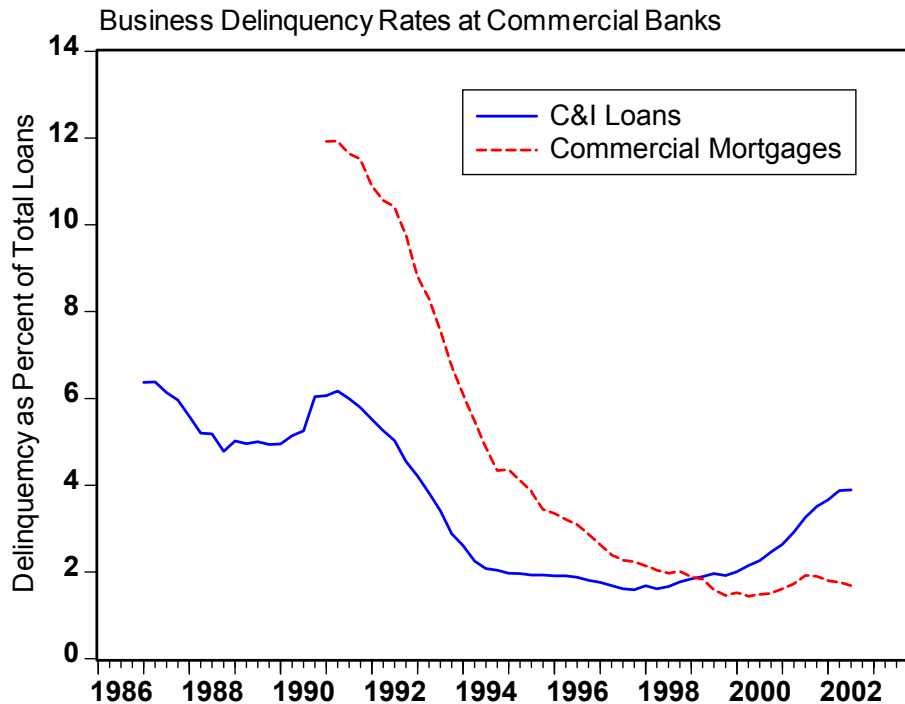
# The U.S. Cycle in Perspective

## *Household Delinquency Rates at Commercial Banks*



# The U.S. Cycle in Perspective

## *Business Delinquency Rates at Commercial Banks*



Business loan delinquencies are on the rise; but are well beneath levels from the last recession

But there are some problem areas

- *C&I Loans*: large visible firms could alter public perception of corporate credit quality
  - Quality spreads widened after Enron, Worldcom, and other corporate scandals
- *Commercial Mortgages*: recession could lead to renegotiated leases and pose problems for commercial mortgage lenders
  - But so far, delinquencies suggest that this has not been a problem at banks
- *But troubled syndicated loans* (those with more than 3 lenders) have reached levels not seen since early 1990s
  - Non-bank lenders appear to have higher share of the problem loans than banks
  - Problems at banks appear concentrated at non-prime lenders

There is some very good news in the lending area

- Bank capital is excellent—a far different condition from early 1990s
- The FOMC's liquidity injections have assured availability of loanable funds as the recovery begins

Bottom line: the economy has the ability to finance the recover; inadequate lending capacity will not retard the recovery



# The U.S. Outlook

## *Blue Chip Financial Forecasts – Real GDP*

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Forecaster (chart, next page) see  
improvement growth going forward

Chart captures the average of the 45  
respondents for each quarter through  
first quarter of 2004

Chart also reports the average of the 10  
highest and the 10 lowest forecasters

Low-forecast group sees a dip a fourth  
quarter dip with a rebound after that

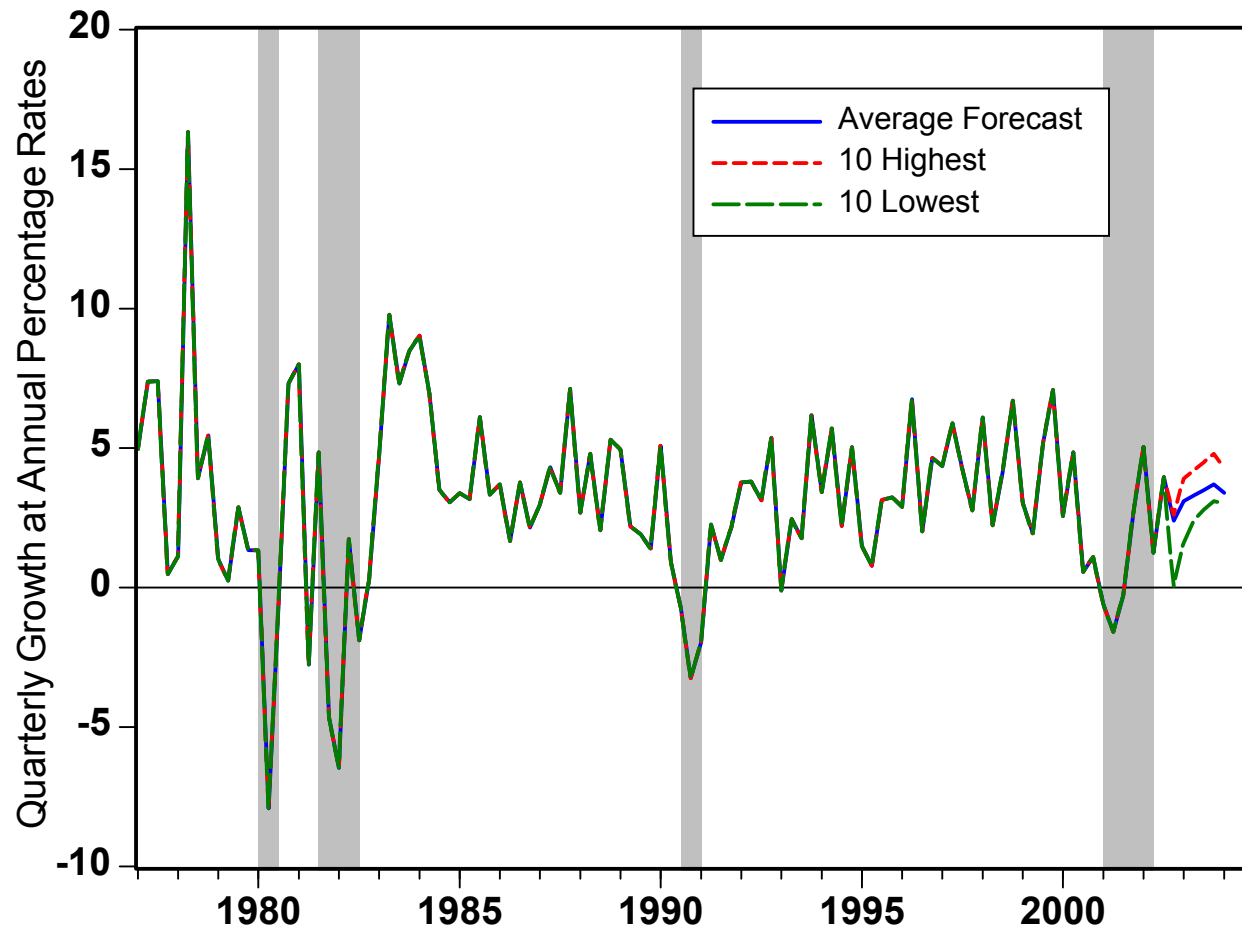
By the end of the forecast horizon, the  
low-forecast group is aligned with the  
rest of the survey panel

### View on 2003

- Average(consensus) forecast is  
3.4% quarterly real GDP growth
- Very low probability should be  
attached to high-forecast results  
(4.4%)
  - This is possible only if there is a  
very sizeable rebound abroad
    - Prospects for this are slim
- Lower bound of 2.4% may be too  
optimistic if the contingency  
scenario materializes

# The U.S. Outlook – Graphic Portrayal

## *Blue Chip Financial Forecasts – Real GDP*



**Table 1. Overview of U.S. Baseline Economic Outlook**

	2002				2003				2004				Year-over-Year Growth 2002 2003 2004		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)			
1 Gross Domestic Product	10,313.1	10,376.9	10,503.7	10,573.7	10,688.7	10,817.1	10,938.2	11,072.5	11,221.7	11,377.7	11,522.5	11,672.9	3.6	4.2	5.2
2 Change*	4.5	4.9	5.1	2.7	4.4	4.9	4.6	5.0	5.5	5.7	5.2	5.3			
3 Gross Dom Product ('96\$)	9,363.2	9,392.4	9,484.0	9,508.0	9,571.4	9,643.3	9,711.8	9,791.2	9,875.6	9,959.1	10,039.9	10,120.2	2.4	2.6	3.3
4 Change*	5.0	1.3	4.0	1.0	2.7	3.0	2.9	3.3	3.5	3.4	3.3	3.2			
5 Personal Consump. Exp. ('96\$)	6,513.8	6,542.4	6,609.2	6,664.7	6,700.9	6,752.1	6,796.7	6,845.8	6,896.5	6,947.0	6,995.9	7,044.5	3.2	2.9	2.9
6 Change*	3.1	1.8	4.1	3.4	2.2	3.1	2.7	2.9	3.0	3.0	2.9	2.8			
7 Equipment and Software ('96\$)	953.7	961.4	976.8	982.9	989.4	998.9	1,010.0	1,022.7	1,037.4	1,054.2	1,070.4	1,085.4	-2.0	3.8	5.6
8 Change*	-2.7	3.3	6.6	2.5	2.7	3.9	4.5	5.1	5.9	6.6	6.3	5.7			
9 Nonresid. Construction ('96\$)	243.2	231.7	218.7	215.5	213.0	210.8	208.7	206.5	204.7	203.2	202.0	201.0	-16.1	-7.7	-3.3
10 Change*	-14.2	-17.6	-20.6	-5.6	-4.6	-4.0	-4.1	-4.1	-3.5	-2.8	-2.3	-2.1			
11 Residential Construction ('96\$)	383.6	386.1	388.1	387.9	387.8	387.2	387.2	387.1	387.0	387.0	386.9	385.9	3.5	0.2	-0.2
12 Change*	14.3	2.6	2.1	-0.2	-0.1	-0.6	-0.1	-0.1	-0.1	-0.1	-0.1	-1.1			
13 Federal Defense ('96\$)	388.5	395.8	402.7	407.8	415.0	420.5	425.5	431.1	436.5	441.3	444.9	448.4	8.9	6.1	4.7
14 Change*	11.6	7.7	7.2	5.1	7.3	5.4	4.9	5.4	5.0	4.5	3.3	3.2			
15 Federal Nondefense ('96\$)	209.3	212.9	212.5	214.8	215.4	217.0	217.6	218.9	219.6	220.6	221.3	222.2	3.9	2.3	1.7
16 Change*	0.4	7.1	-0.7	4.4	1.1	3.1	1.1	2.4	1.3	1.8	1.2	1.6			
17 State + Local ('96\$)	1,099.3	1,094.7	1,101.2	1,107.3	1,115.3	1,123.4	1,131.9	1,140.4	1,149.1	1,157.9	1,166.8	1,175.7			
18 Change*	4.6	-1.7	2.4	2.2	2.9	2.9	3.1	3.1	3.1	3.1	3.1	3.1	2.9	2.5	3.1
19 Net Exports ('96\$)	-446.6	-487.4	-487.5	-482.8	-480.9	-486.0	-487.3	-485.9	-483.7	-482.0	-479.3	-474.3			
20 Change in Bus. Invent. ('96\$)	-28.9	4.9	15.5	9.9	15.5	19.3	21.5	24.6	28.5	29.9	30.9	31.5			
21 Nonfarm Inventories	-35.3	4.1	17.7	11.7	16.3	19.4	21.4	24.4	28.4	29.9	30.9	31.5			
22 Farm Inventories	6.4	0.8	-2.2	-1.9	-0.8	0.0	0.2	0.1	0.1	0.0	0.0	0.0			
23 GNP Deflator ('96 = 100) *	1.4	1.2	1.0	1.7	1.7	1.8	1.6	1.6	1.9	2.2	1.8	2.0	1.1	1.6	1.9
24 CPI (1982-84 = 100) *	10.6	3.4	1.9	3.0	2.7	2.6	2.3	2.4	2.5	3.0	2.7	2.8	3.7	2.6	2.6
25 PPI (1982 = 100) *	-0.1	1.1	-0.7	2.0	1.8	-0.1	0.3	0.6	0.5	0.5	1.0	1.2	-1.4	0.9	0.6

**Table 2. Cyclical Characteristics of Baseline U.S. Outlook**

	2002				2003				2004				Year-over-Year Growth 2002 2003 2004		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)			
1 Domestic Final Sales ('96\$)	9,838.7	9,874.9	9,956.0	9,980.9	10,036.8	10,109.9	10,177.5	10,252.6	10,330.9	10,411.2	10,488.3	10,563.0	2.1	2.7	3.0
2 Change	2.7	1.5	3.3	1.0	2.3	2.9	2.7	3.0	3.1	3.1	3.0	2.9			
3 Cyclical Dom. Demand ('96\$)	2,556.4	2,559.9	2,616.6	2,605.6	2,607.9	2,624.7	2,636.8	2,652.8	2,671.7	2,692.8	2,711.8	2,728.5	0.8	1.8	2.7
4 Change*	-3.0	0.5	9.2	-1.7	0.3	2.6	1.9	2.4	2.9	3.2	2.8	2.5			
5 Cyclical Cons. Demand ('96\$)	975.9	980.7	1,033.0	1,019.3	1,017.7	1,027.7	1,031.0	1,036.5	1,042.5	1,048.5	1,052.4	1,056.2	7.5	2.6	2.1
6 Change*	-6.3	2.0	23.1	-5.2	-0.6	4.0	1.3	2.1	2.4	2.3	1.5	1.5			
7 Autos and Parts ('96\$)	370.0	369.1	407.8	391.7	386.9	391.3	392.3	393.8	395.2	396.9	395.6	394.0	6.3	1.7	1.1
8 Change*	-27.1	-1.0	49.0	-14.9	-4.8	4.6	1.0	1.6	1.4	1.7	-1.3	-1.6			
9 Other Durables ('96\$)	605.9	611.6	625.2	627.6	630.8	636.4	638.7	642.6	647.3	651.6	656.8	662.2	8.4	3.2	2.7
10 Change*	10.0	3.8	9.2	1.5	2.1	3.6	1.4	2.5	2.9	2.7	3.2	3.4			
11 Fixed Investment ('96\$)	1,576.4	1,572.6	1,573.1	1,586.4	1,590.2	1,597.0	1,605.8	1,616.3	1,629.2	1,644.4	1,659.4	1,672.2	-3.1	1.6	3.1
12 Change*	4.2	5.5	6.0	3.4	1.0	1.7	2.2	2.6	3.2	3.8	3.7	3.1			
13 Residential Construction ('96\$)	383.6	386.1	388.1	387.9	387.8	387.2	387.2	387.1	387.0	387.0	386.9	385.9	3.5	0.2	-0.2
14 Change*	14.3	2.6	2.1	-0.2	-0.1	-0.6	-0.1	-0.1	-0.1	-0.1	-0.1	-1.1			
15 Nonresid. Construction ('96\$)	243.2	231.7	218.7	215.5	213.0	210.8	208.7	206.5	204.7	203.2	202.0	201.0	-16.1	-7.7	-3.3
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18 Change*	-2.7	3.3	6.6	2.5	2.7	3.9	4.5	5.1	5.9	6.6	6.3	5.7			
19 Noncyclical Demand ('96\$)@	6,806.8	6,832.5	6,867.4	6,902.4	6,963.5	7,018.6	7,075.0	7,138.4	7,203.9	7,266.3	7,328.0	7,391.7	3.0	2.9	3.5
20 Change*	8.3	1.5	2.1	2.1	3.6	3.2	3.3	3.6	3.7	3.5	3.4	3.5			
21 Chg. in Business Inventories	-28.9	4.9	15.5	9.9	15.5	19.3	21.5	24.6	28.5	29.9	30.9	31.5			
22 Gross Dom. Purchases ('96\$)#	9,762.7	9,829.8	9,924.5	9,990.8	10,052.3	10,129.3	10,199.1	10,277.2	10,359.3	10,441.1	10,519.2	10,594.5	3.0	2.9	3.1
23 Change*	5.9	2.8	3.9	2.7	2.5	3.1	2.8	3.1	3.2	3.2	3.0	2.9			
24 Net Exports ('96\$)	-446.6	-487.4	-487.5	-482.8	-480.9	-486.0	-487.3	-485.9	-483.7	-482.0	-479.3	-474.3			
25 GDP ('96\$)**	9,363.2	9,392.4	9,484.0	9,508.0	9,571.4	9,643.3	9,711.8	9,791.2	9,875.6	9,959.1	10,039.9	10,120.2	2.4	2.6	3.3
26 Change*	5.0	1.3	4.0	1.0	2.7	3.0	2.9	3.3	3.5	3.4	3.3	3.2			

Notes: @ Noncyclical Demand = Consumer spending on nondurable goods and services and all forms of government spending (excluding CCC inventories). # Gross Domestic Purchases = Domestic final demand plus changes in total inventories. \* Quarter-to-quarter percent changes expressed at compound annual rates. A = actual. E = estimated. Except for price indexes, all data in billions of dollars. Historical source: BEA and BLS.

**Table 3. The Household Sector**

	2002				2003				2004				Year-over-Year Growth		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
1 Personal Income (\$ Bil.)	8,803.4	8,913.7	8,995.0	9,075.6	9,162.0	9,273.4	9,367.5	9,467.6	9,576.8	9,692.0	9,810.2	9,929.8	3.0	4.1	4.7
2 Change*	4.8	5.1	3.7	3.6	3.9	5.0	4.1	4.3	4.7	4.9	5.0	5.0			
3 Civilian Employment (Mil.)	133.9	134.1	134.6	134.8	134.9	135.2	135.4	135.7	136.1	136.4	136.8	137.1	-0.5	0.7	1.0
4 Change*	-1.2	0.8	1.3	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.0	1.0			
5 Unemployment Rate	5.6	5.9	5.7	5.6	5.6	5.5	5.4	5.3	5.2	5.0	4.9	4.8			
6 Personal Consump. Exp. ('96)	6,513.8	6,542.4	6,609.2	6,664.7	6,700.9	6,752.1	6,796.7	6,845.8	6,896.5	6,947.0	6,995.9	7,044.5	3.2	2.9	2.9
7 Change*	3.1	1.8	4.1	3.4	2.2	3.1	2.7	2.9	3.0	3.0	2.9	2.8			
8 Autos and Parts	975.9	980.7	1,033.0	1,019.3	1,017.7	1,027.7	1,031.0	1,036.5	1,042.5	1,048.5	1,052.4	1,056.2	6.3	1.7	1.1
9 Change*	-6.3	2.0	23.1	-5.2	-0.6	4.0	1.3	2.1	2.4	2.3	1.5	1.5			
10 Other Durable Goods	370.0	369.1	407.8	391.7	386.9	391.3	392.3	393.8	395.2	396.9	395.6	394.0	8.4	3.2	2.7
11 Change*	-27.1	-1.0	49.0	-14.9	-4.8	4.6	1.0	1.6	1.4	1.7	-1.3	-1.6			
12 Nondurable Goods	605.9	611.6	625.2	627.6	630.8	636.4	638.7	642.6	647.3	651.6	656.8	662.2	3.0	2.2	3.0
13 Change*	10.0	3.8	9.2	1.5	2.1	3.6	1.4	2.5	2.9	2.7	3.2	3.4			
14 Services	1,921.4	1,920.9	1,925.3	1,935.0	1,947.0	1,960.5	1,973.6	1,988.1	2,003.5	2,018.7	2,034.3	2,049.8	2.3	2.8	3.1
15 Change*	8.0	-0.1	0.9	2.0	2.5	2.8	2.7	3.0	3.1	3.1	3.1	3.1			
16 Lt. Vehicles	16.3	16.3	17.6	17.1	16.8	17.0	16.9	17.0	17.0	17.0	16.9	16.8	-1.0	0.4	0.0
17 Change*	-38.0	0.1	35.2	-12.4	-5.8	3.8	-0.2	0.5	0.3	0.5	-2.4	-2.7			
18 New Auto Sales (Mil.)	7.9	8.1	8.5	8.2	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1	-3.1	-0.5	0.0
19 Change*	-33.1	8.7	21.7	-13.2	-5.8	3.8	-0.2	0.5	0.3	0.5	-2.4	-2.7			
20 New Light Truck Sales (Mil.)	7.7	7.7	7.5	8.9	8.7	8.8	8.8	8.8	8.8	8.8	8.8	8.7	1.3	10.8	0.0
21 Change*	-11.4	2.3	-8.9	-0.9	-1.6	-4.5	0.1	-3.0	-0.5	-0.4	-0.8	0.6			
22 Private Housing Starts (Mil.)	1.725	1.667	1.698	1.662	1.650	1.633	1.618	1.603	1.588	1.573	1.558	1.531	5.3	-3.7	-3.9
23 Change*	44.9	-12.9	7.7	-8.1	-3.0	-3.9	-3.6	-3.7	-3.7	-3.7	-3.7	-6.7			
24 Single-Family (Mil.)	1.371	1.328	1.340	1.320	1.310	1.300	1.290	1.280	1.270	1.260	1.250	1.230			
25 Multi-Family (Mil.)	0.354	0.338	0.358	0.342	0.340	0.333	0.328	0.323	0.318	0.313	0.308	0.301			
26 Existing Home Sales (Th.)	5,783.3	5,536.7	5,356.7	5,335.2	5,355.7	5,372.3	5,365.7	5,355.1	5,343.5	5,314.9	5,286.9	5,249.4	4.6	-2.6	-1.2
27 Change*	-3.7	-2.0	-1.2	-1.6	1.5	1.2	-0.5	-0.8	-0.9	-2.1	-2.1	-2.8			

**Table 4. The Corporate Sector**

	2002				2003				2004				Year-over-Year Growth		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
1 Fixed Business Invest. ('96\$)	1,188.4	1,181.1	1,179.0	1,198.5	1,202.4	1,209.8	1,218.6	1,229.2	1,242.1	1,257.4	1,272.5	1,286.4	-5.4	2.4	4.1
2 Change*	5.4	7.0	7.5	6.8	1.3	2.5	3.0	3.5	4.3	5.0	4.9	4.4			
3 Structures	243.2	231.7	218.7	215.5	213.0	210.8	208.7	206.5	204.7	203.2	202.0	201.0	-16.1	-7.7	-3.3
4 Change*	-14.2	-17.6	-20.6	-5.6	-4.6	-4.0	-4.1	-4.1	-3.5	-2.8	-2.3	-2.1			
5 Equipment and Software	953.7	961.4	976.8	982.9	989.4	998.9	1,010.0	1,022.7	1,037.4	1,054.2	1,070.4	1,085.4	-2.0	3.8	5.6
6 Change*	-2.7	3.3	6.6	2.5	2.7	3.9	4.5	5.1	5.9	6.6	6.3	5.7			
7 Chg. in Bus. Invent. ('96\$)	-28.9	4.9	15.5	9.9	15.5	19.3	21.5	24.6	28.5	29.9	30.9	31.5			
8 Chg. in Nonfarm Inventories	-35.3	4.1	17.7	11.7	16.3	19.4	21.4	24.4	28.4	29.9	30.9	31.5			
9 Corporate Profits (B.T.)	639.4	657.9	668.5	663.3	666.6	677.6	686.3	698.6	717.0	738.2	753.4	771.2			
10 Corporate Profits (A.T.)	437.0	444.3	453.7	449.4	450.8	457.4	463.2	471.6	484.0	498.3	508.5	520.6	-5.3	3.3	9.1
11 Change*	8.2	6.9	8.7	-3.8	1.3	6.0	5.2	7.4	10.9	12.4	8.5	9.8			
12 Internal Funds (A.T.)	775.0	758.8	754.9	767.3	775.4	788.1	801.8	816.0	831.3	846.4	859.5	873.5	8.0	4.1	7.2
13 Change*	-19.4	-8.1	-2.0	6.7	4.3	6.7	7.2	7.3	7.7	7.5	6.3	6.6			
14 Dividends	424.2	430.8	437.7	441.6	445.0	448.7	452.9	457.6	463.0	469.1	475.9	483.0	5.8	4.0	4.8
15 Change*	6.4	6.4	6.6	3.6	3.2	3.3	3.8	4.2	4.8	5.4	5.9	6.1			
16 Output per Hour*	8.2	2.0	5.3	0.5	2.2	2.4	2.1	2.5	2.5	2.4	2.3	2.3	4.7	2.3	2.4
17 Hourly Compensation	3.8	3.9	4.0	1.8	3.7	4.1	3.8	4.0	4.3	4.4	4.2	4.2	2.7	3.7	4.2
18 Unit Labor Costs*	-4.8	2.5	-0.3	1.4	1.6	1.7	1.6	1.6	1.7	2.0	1.9	1.9	-1.9	1.4	1.8

**Table 5. The International Sector**

	2002				2003				2004				Year-over-Year Growth		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
1 Net Exports ('96\$)	-446.6	-487.4	-487.5	-482.8	-480.9	-486.0	-487.3	-485.9	-483.7	-482.0	-479.3	-474.3			
2 Exports ('96\$)	1,030.6	1,065.5	1,074.3	1,092.0	1,104.9	1,121.9	1,138.2	1,160.4	1,183.5	1,202.5	1,222.0	1,241.6	-1.0	6.2	7.2
3 Change*	3.5	14.2	3.3	6.7	4.8	6.3	5.9	8.0	8.2	6.5	6.7	6.6			
4 Imports ('96\$)	1,477.1	1,552.9	1,561.8	1,574.8	1,585.8	1,607.9	1,625.5	1,646.3	1,667.3	1,684.4	1,701.3	1,715.9	3.3	4.8	4.7
5 Change*	8.5	22.2	2.3	3.4	2.8	5.7	4.4	5.2	5.2	4.2	4.1	3.5			
6 Trade-Weighted Index	107.0	104.2	100.0	98.1	97.1	96.6	96.2	95.9	95.7	95.4	95.3	95.1	-1.9	-5.7	-1.1

Notes: Except where noted, all data in billions of dollars. Historical source: BEA, BLS, and Federal Reserve. A = actual. E = estimated. \* Quarter-to-quarter percent changes expressed at compound annual rates.



# Outlook for Interest Rates

*MTSU*

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## *Benefits from the year's low interest rates*

### Short-term borrowers

- Prime rate borrowers
- ARM borrowers

### Long-term borrowers

- Low fixed mortgage produced massive refinancings
  - These have probably run their course
- Businesses refinanced bonds

## *Baseline forecast:*

- No further cuts in the federal funds rate target
- But also no increase until around-mid-year mid-year 2003
- The government bond dealers do not see an increase until September 2003

Increases in short-term rates will continue throughout the forecast horizon

- Assumes that
  - The expansion takes hold
  - Liquidity injected in 2001-02 must be removed to hold line on inflation

Timely removal of liquidity will keep long-term interest rates from rising during the forecast horizon

Credit risk spreads will narrow next year

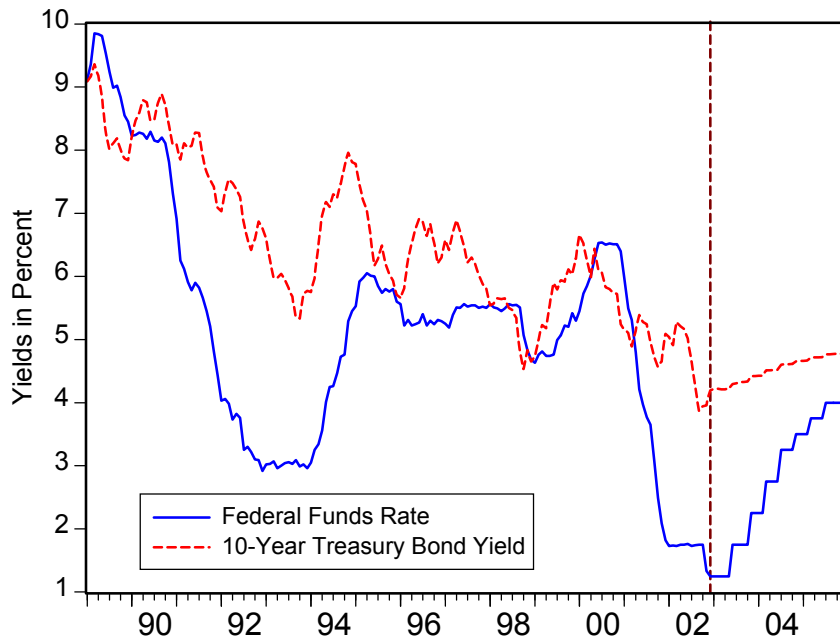
- Bankruptcy risks diminish as profits recover
- End of corporate scandals
- Sarbannes-Oxley Act may limit future fears of governance abuses
- Successful reform of corporate audit committees could bolster confidence in corporate governance



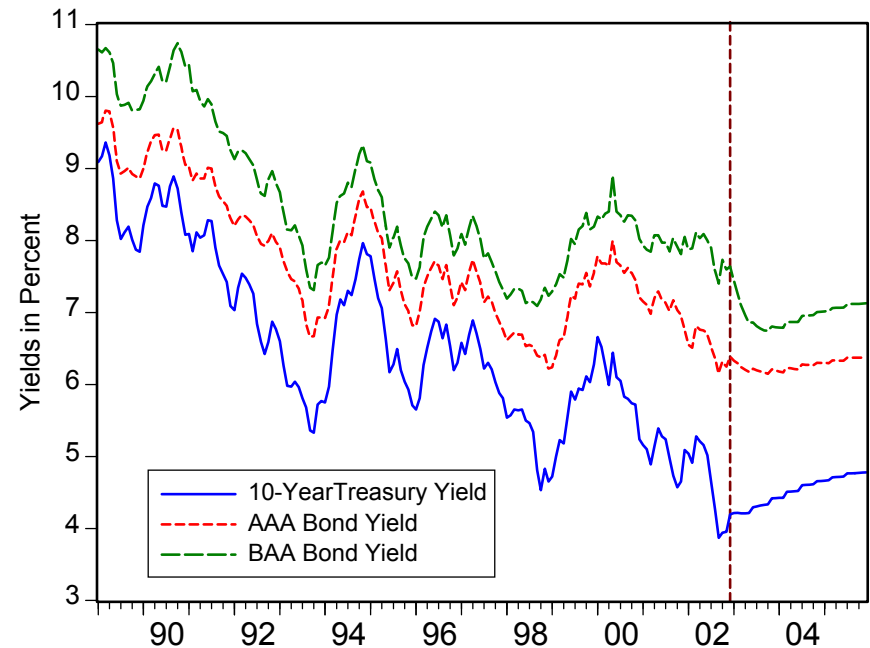
# Interest Rate Outlook – Graphic Portrayal

## *MTSU Baseline Interest Rate Forecast*

### Short- Versus Long-Term rates



### Credit Risk Premiums



**Table 6. Money Market Interest Rates**

		2002				2003				2004				Annual Averages		
		I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
1	Federal Funds	1.73	1.75	1.74	1.44	1.25	1.42	1.75	2.08	2.42	2.75	3.25	3.42	1.67	1.63	2.96
Commercial Paper																
2	1-month	1.74	1.75	1.73	1.46	1.31	1.49	1.85	2.20	2.52	2.86	3.36	3.53	1.67	1.71	3.07
3	3-month	1.76	1.76	1.72	1.45	1.37	1.55	1.89	2.24	2.58	2.92	3.41	3.58	1.67	1.76	3.12
4	6-month	1.79	1.79	1.72	1.46	1.39	1.58	1.92	2.27	2.62	2.96	3.45	3.62	1.69	1.79	3.16
Finance Paper																
5	1-month	1.76	1.76	1.73	1.47	1.32	1.50	1.84	2.19	2.51	2.83	3.33	3.50	1.68	1.71	3.04
6	3-month	1.77	1.78	1.74	1.47	1.37	1.56	1.89	2.24	2.59	2.93	3.43	3.60	1.69	1.77	3.14
7	6-month	1.80	1.81	1.74	1.47	1.39	1.58	1.91	2.26	2.60	2.93	3.42	3.59	1.70	1.78	3.14
Treasury Bills																
8	1-month	1.76	1.75	1.67	1.35	1.22	1.38	1.70	2.03	2.36	2.69	3.19	3.35	1.63	1.58	2.90
9	3-month	1.90	1.92	1.67	1.39	1.26	1.44	1.82	2.20	2.59	2.97	3.52	3.74	1.72	1.68	3.21
Negotiable CDs																
10	1-month	1.80	1.80	1.77	1.50	1.33	1.52	1.87	2.23	2.54	2.88	3.40	3.57	1.72	1.74	3.10
11	3-month	1.82	1.84	1.76	1.50	1.37	1.54	1.88	2.27	2.63	2.98	3.48	3.67	1.73	1.76	3.19
12	6-month	1.99	2.00	1.77	1.49	1.39	1.58	1.98	2.37	2.77	3.16	3.72	3.94	1.81	1.83	3.40
Eurodollar Deposit																
13	1-month	1.79	1.78	1.76	1.49	1.31	1.49	1.85	2.21	2.52	2.85	3.37	3.54	1.70	1.71	3.07
14	3-month	1.83	1.84	1.75	1.50	1.38	1.55	1.88	2.27	2.62	2.97	3.48	3.66	1.73	1.77	3.18
15	6-month	1.99	2.04	1.76	1.49	1.42	1.60	1.99	2.39	2.80	3.18	3.74	3.97	1.82	1.85	3.42
Retail Bank Deposit																
16	Saving deposits	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
17	3-month	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
18	6-month	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

**Table 7. Capital Market Instruments**

		2002				2003				2004				Annual Averages		
		I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
U.S. Treasury Notes and Bonds																
1	1-Yr Note	2.32	2.37	1.81	1.53	1.46	1.60	2.01	2.44	2.86	3.28	3.88	4.14	2.01	1.88	3.54
2	2-Yr Note	3.20	3.26	2.23	1.88	1.91	2.06	2.37	2.68	3.00	3.31	3.76	3.94	2.64	2.25	3.50
3	5-Yr Note	4.46	4.48	3.35	2.92	2.88	2.95	3.11	3.26	3.41	3.56	3.77	3.86	3.80	3.05	3.65
4	10-Yr Note	5.08	5.13	4.26	4.03	4.21	4.24	4.32	4.39	4.45	4.52	4.60	4.64	4.62	4.29	4.55
5	30-Yr Note	5.63	5.78	5.22	5.08	5.22	5.11	5.14	5.23	5.21	5.26	5.34	5.33	5.43	5.17	5.29
Other Bonds																
6	AAA Bonds	6.62	6.74	6.35	6.32	6.29	6.20	6.18	6.18	6.19	6.21	6.27	6.29	6.51	6.21	6.24
7	BAA Bonds	7.96	8.04	7.63	7.65	7.26	6.89	6.78	6.78	6.81	6.87	6.95	6.99	7.82	6.93	6.91
8	State and Local	5.19	5.18	4.90	4.91	4.71	4.46	4.40	4.40	4.43	4.47	4.54	4.56	5.04	4.49	4.50
Consumer Rates																
9	Auto Loans - Fin. Co.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
10	Auto Loans - Banks	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
11	Revolving Credit	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
12	Other	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mortgage Rates - Primary Mkt.																
13	30-Yr (FHLMC - PMMS)	6.71	6.55	5.93	5.73	5.84	5.88	5.99	6.07	6.14	6.21	6.31	6.35	6.23	5.94	6.25
14	15-Yr (FHLMC - PMMS)	6.10	5.90	5.23	4.84	4.49	4.45	4.66	4.79	4.88	5.00	5.21	5.29	5.52	4.60	5.09
15	ARM (FHLMC - PMMS)	5.09	4.80	4.39	4.17	4.04	4.07	4.38	4.72	5.07	5.44	6.01	6.23	4.61	4.30	5.69
Mortgage Rates - Secondary Mkt.																
16	30-Yr (FHLMC Req. Net Yield)	6.97	6.84	6.29	6.10	6.21	6.20	6.25	6.30	6.35	6.39	6.47	6.50	6.55	6.24	6.43
17	15-Yr (FHLMC Req. Net Yield)	6.46	6.29	5.71	5.40	5.28	5.27	5.36	5.45	5.54	5.63	5.78	5.82	5.97	5.34	5.69
18	GNMA (Current Coupon)	6.32	6.19	5.39	5.01	5.13	5.24	5.31	5.38	5.46	5.53	5.63	5.68	5.73	5.26	5.58
Cost of Funds Index																
19	U.S. Average	3.66	3.39	3.21	2.57	2.06	2.00	2.16	2.37	2.61	2.87	3.31	3.44	3.21	2.15	3.06
20	11th FHLB District	2.74	2.78	2.78	2.27	1.85	1.87	2.10	2.37	2.65	2.95	3.43	3.58	2.64	2.05	3.15

Sources: Federal Reserve, Federal Home Loan Bank, Federal Home Loan Mortgage Corp.

Notes: A = Actual. E = Forecasts.

December 10, 2002



# The U.S. Outlook – Potential Problem Areas

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## *The Risk of War*

- Times of uncertainty can produce economic paralysis, delaying upswing
  - In U.S. investment spending
  - In activity abroad and U.S. exports
- Paralysis could also drag vehicle sales and housing from their heights

## *Corporate Earnings and Pricing Power*

- Global capacity limits ability of manufacturing to secure price increases which affects ability to manage earning

## *Threat of Deflation*

- Prices of goods less energy (CPI basis) fell at 0.5 percent annual rate over the last 8 quarters versus 3.7 percent annual rate for services less energy (CPI basis)

## *Pensions and Corporate Earnings*

- Gains in value of defined benefit pensions have bolstered corporate earnings in the last few years
- Lower projected asset appreciation could reverse this trend and produce a drag on earnings if equity prices do not rebound

## *Problems Re-Insurance Industry*

- These institutions buy insurance risk from property and casualty insurers and are very active in the credit derivative market
- They play a pivotal role in financial markets
- Their capacity to perform that role has been severely damaged through
  - Large losses from September 11 and several natural disasters
  - Balance sheet losses from the collapse in equity prices and losses from bond defaults
  - Possible problems in credit derivatives

# The U.S. Outlook – Potential Problem Areas

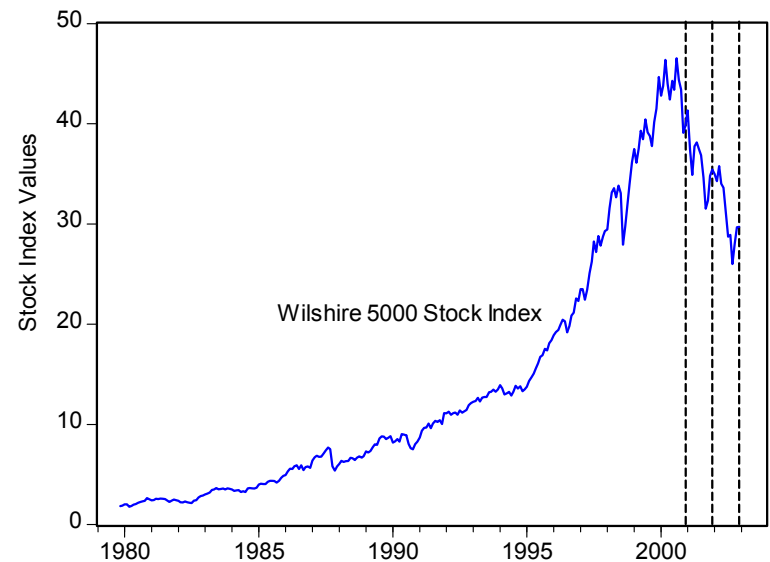
## *Equity Prices*

2003 will be third consecutive year-over-year decline in equity prices

Generally, wealth effect shown to have minimal effect on spending

But last three years have not been ordinary times

- This year may be the second year in recent memory in which ***virtually all*** defined contribution pension plans invested in equities will be worth less than year-ago levels even with this year's contributions
- True for both employer pension plans and supplemental plans in 403b and 401k plans



# The Tennessee Cycle in Perspective

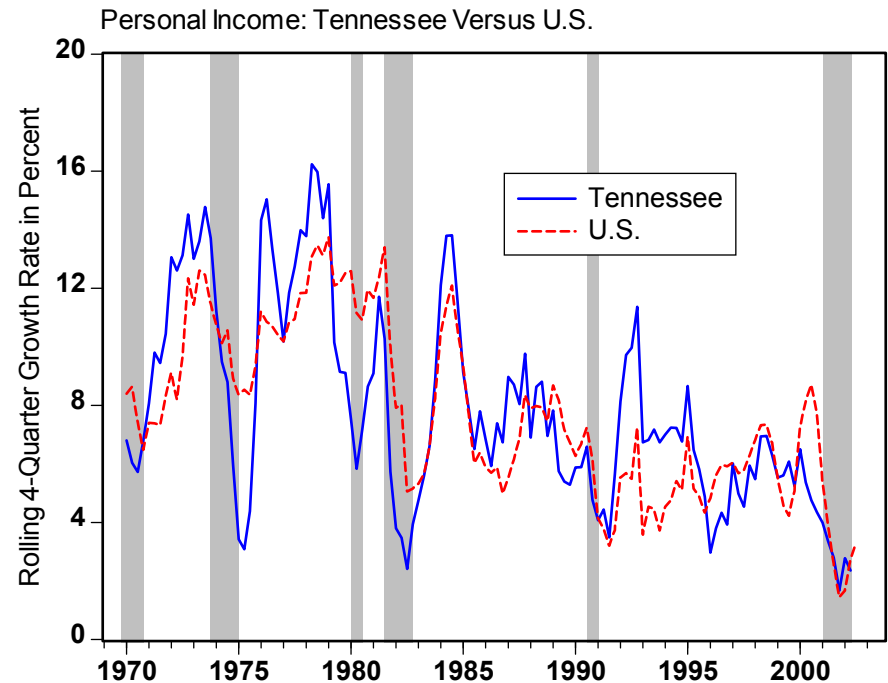
## *Personal Income – Tennessee Versus U.S.*

Rolling 4-quarter growth in state and nation follows roughly the same cyclical pattern

- For the full 33 years, the rolling 4-quarter growth in the state and the U.S. were closely correlated after adjusting for systematic errors
- Each 1% growth in the U.S. is met with 1% growth in Tennessee with a lapse of about 8 quarters

Admittedly, there are sizable short-run deviations between the two

- These differences seem to cancel out over an 8- to 9-quarter span



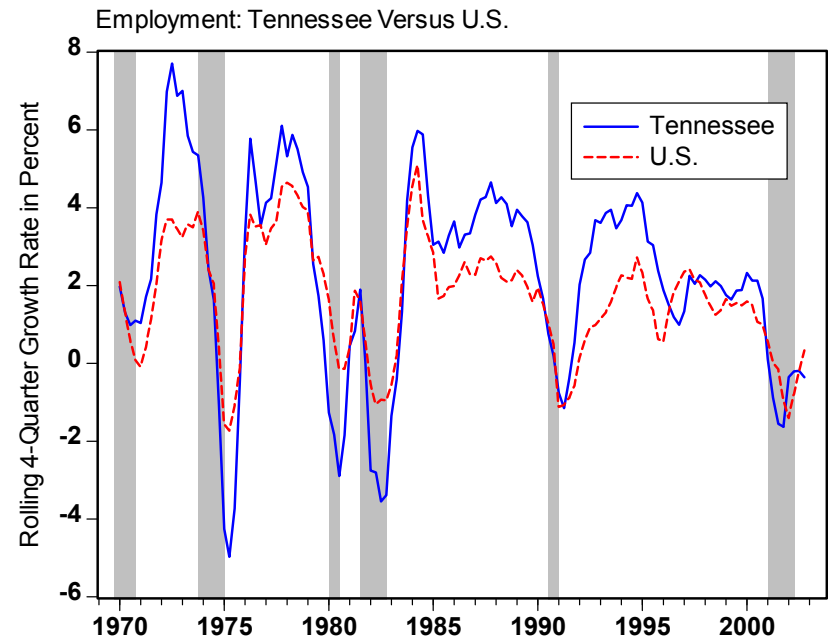
# The Tennessee Cycle in Perspective

## *Labor Markets – Tennessee Versus U.S.*

Growth pattern moves roughly in tandem

Pattern has tighter co-movement as decline gathers momentum

Once economic downturn gathers momentum, negative growth seems unavoidable



# The Tennessee Cycle in Perspective

## *Housing Activity – Tennessee Versus U.S.*

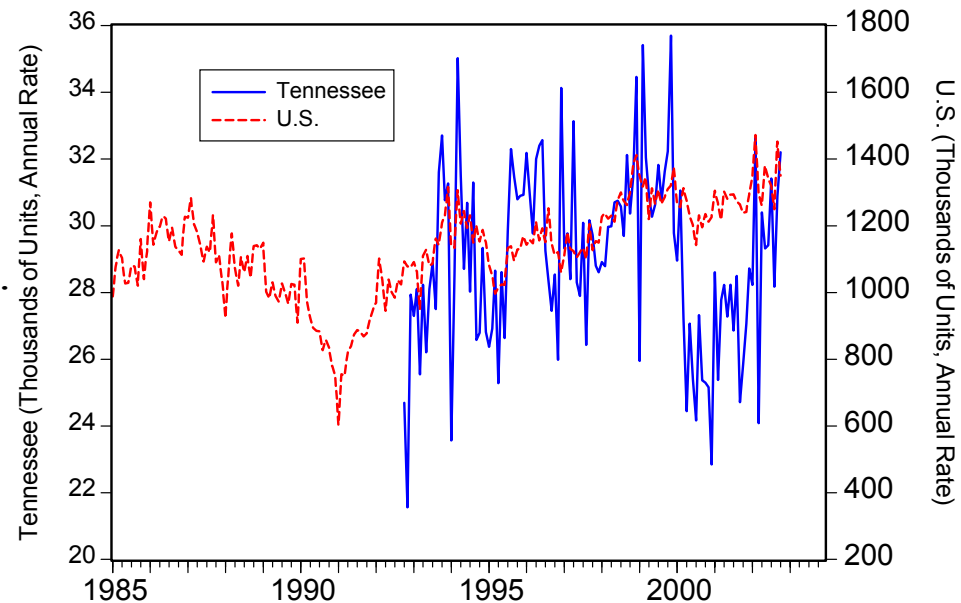
Housing seemed relatively stronger in Tennessee than U.S. for most of the 1990s

Weakness in 2000 seemed relatively more severe in Tennessee than in U.S.

Rebound in late 2001 attributable to lower mortgage rates

- Rebound in Tennessee relatively late compared with U.S.

General state of housing in both Tennessee and the U.S. may be too strong for this phase of the cycle



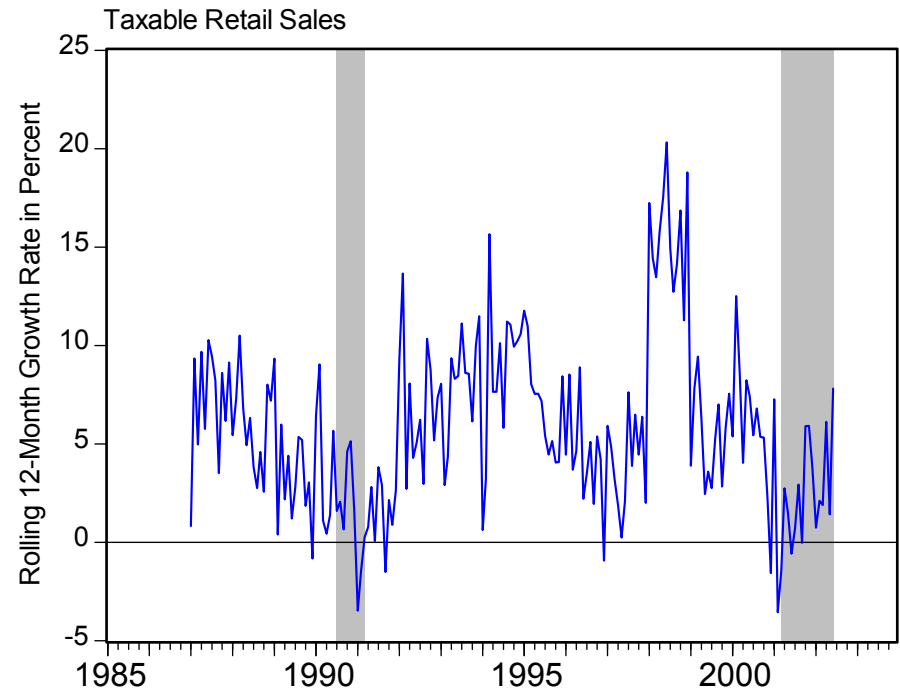
# The Tennessee Cycle in Perspective

## *Consumer Spending*

Rolling 12-month growth through June 2001 portrays a recession pattern

Year-over-year declines in this recession is out of phase with last recession

- Last recession growth was weak in early phase of recovery
- This recession, sales surprisingly strong
  - This may be due to housing construction and car sales
  - If so, the state could be vulnerable to any retrenchment in either of these sectors





**Table 8. Baseline Tennessee Outlook**

	2002				2003				2004				Year-over-Year Growth		
	I(A)	II(A)	III(A)	IV(E)	I(E)	II(E)	III(E)	IV(E)	I(E)	II(E)	III(E)	IV(E)	2002	2003	2004
<b>National Trends</b>															
1 Civilian Employment (Mil.)	133.9	134.1	134.6	134.8	134.9	135.2	135.4	135.7	136.1	136.4	136.8	137.1	-0.5	0.7	1.0
2 Change*	-1.2	0.8	1.3	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.0	1.0			
3 Personal Income	8,803.4	8,913.7	8,995.0	9,075.6	9,162.0	9,273.4	9,367.5	9,467.6	9,576.8	9,692.0	9,810.2	9,929.8	3.0	4.1	4.7
4 Change*	4.8	5.1	3.7	3.6	3.9	5.0	4.1	4.3	4.7	4.9	5.0	5.0			
5 Income Per Employee (Th)	65.749	66.446	66.844	67.348	67.892	68.605	69.167	69.748	70.372	71.031	71.715	72.413	3.5	3.4	3.7
6 Change*	6.1	4.3	2.4	3.1	3.3	4.3	3.3	3.4	3.6	3.8	3.9	3.9			
7 Housing Start (Mil. of Units)	1.725	1.667	1.698	1.662	1.650	1.633	1.618	1.603	1.588	1.573	1.558	1.531	5.3	-3.7	-3.9
8 Change*	44.9	-12.9	7.7	-8.1	-3.0	-3.9	-3.6	-3.7	-3.7	-3.7	-3.7	-6.7			
<b>Tennessee</b>															
9 Nonagric. Employment (Th)	2,718.8	2,703.7	2,701.5	2,696.2	2,706.0	2,712.2	2,716.2	2,716.1	2,719.1	2,725.7	2,737.0	2,744.8	-0.3	0.3	0.7
10 Change*	1.9	-2.2	-0.3	-0.8	1.5	0.9	0.6	0.0	0.4	1.0	1.7	1.1			
11 Personal Income	158.6	159.9	161.4	163.0	164.9	167.0	168.9	170.8	172.8	175.0	177.3	179.7	3.8	4.4	5.0
12 Change*	9.2	3.3	3.9	3.8	4.7	5.3	4.6	4.5	4.9	5.2	5.5	5.3			
13 Dividends and Interest	24.6	25.1	25.4	25.7	26.0	26.2	26.6	26.9	27.3	27.7	28.1	28.5	1.9	4.9	5.6
14 Change*	0.4	8.4	5.8	4.8	4.8	3.2	5.1	5.5	5.9	6.4	5.6	5.4			
15 Income Per Employee (Th)	58.338	59.142	59.760	60.443	60.925	61.574	62.177	62.867	63.551	64.205	64.797	65.453	4.0	4.1	4.2
16 Change*	7.1	5.6	4.2	4.7	3.2	4.3	4.0	4.5	4.4	4.2	3.7	4.1			
17 Retail Sales	65.7	67.3	67.5	69.0	69.5	69.9	71.0	71.6	72.7	73.2	74.1	75.1	3.6	4.6	4.6
18 Change*	-4.5	10.1	0.7	9.6	2.8	2.4	6.5	3.4	6.3	2.8	5.0	5.1			
19 Building Permits (Th)	28.311	29.708	30.143	32.191	30.641	29.696	29.828	29.447	28.838	28.549	27.886	27.321	10.4	-0.6	-5.9
20 Change*	17.2	21.2	6.0	30.1	-17.9	-11.8	1.8	-5.0	-8.0	-3.9	-9.0	-7.9			

Notes: Except where noted, all data in billions of dollars. Th = thousands of units, persons, or dollars. Historic sources: BEA, BLS, and State of Tennessee. A = actual. E = estimated.

\* Quarter-to-quarter percent changes expressed at compound annual rates.

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**Table 9. Prospects for Tax Revenue: Official State Finance Forecasts**

	Actual												Estimated		
	FY90-91	FY91-92	FY92-93	FY93-94	FY94-95	FY95-96	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	FY02-03	FY03-04	FY04-05
1 Total Revenue*	4,215.6	4,431.4	5,441.5	5,505.5	5,767.1	6,071.7	6,415.1	6,791.0	7,030.3	7,558.5	7,636.3	7,508.6	8,502.7		
2 Chg@	1.0	5.1	22.8	1.2	4.8	5.3	5.7	5.9	3.5	7.5	1.0	-1.7	13.2		
3 Sales and Use*	2,354.3	2,540.7	3,444.2	3,370.2	3,477.0	3,673.8	3,906.7	4,102.7	4,337.3	4,608.3	4,642.7	4,654.7	5,426.3		
4 Chg@	0.8	7.9	35.6	-2.1	3.2	5.7	6.3	5.0	5.7	6.2	0.7	0.3	16.6		
5 Income*	97.0	93.2	95.0	100.3	101.3	114.5	128.9	160.4	160.6	180.2	198.6	144.5	151.8		
6 Chg@	-5.8	-4.0	1.9	5.6	1.0	13.0	12.6	24.5	0.1	12.2	10.2	-27.2	5.0		
7 Gross Receipts*	163.4	166.1	166.7	165.6	180.6	175.9	189.0	188.4	199.3	213.5	216.8	223.9	228.3		
8 Chg@	2.0	1.6	0.3	-0.7	9.0	-2.6	7.4	-0.3	5.8	7.1	1.5	3.3	2.0		
9 Excise plus Franchise*	550.0	532.8	605.5	677.9	777.0	816.1	888.5	913.8	893.4	1,074.3	1,112.1	968.4	1,017.4		
10 Chg@	4.6	-3.1	13.6	12.0	14.6	5.0	8.9	2.8	-2.2	20.3	3.5	-12.9	5.1		
11 Gasoline Tax*	489.3	504.7	491.0	552.6	528.3	535.9	543.3	563.2	567.9	576.6	569.4	576.9	578.5		
12 Chg@	-1.8	3.2	-2.7	12.6	-4.4	1.4	1.4	3.7	0.8	1.5	-1.3	1.3	0.3		
13 Vehicle Registration*	141.3	147.2	155.8	165.6	179.5	185.2	184.2	196.5	201.5	219.3	212.1	221.2	234.3		
14 Chg@	-3.1	4.2	5.9	6.3	8.4	3.1	-0.5	6.6	2.6	8.8	-3.3	4.3	5.9		
15 Fuel Tax*	97.7	100.1	105.0	111.2	122.2	126.7	126.8	133.2	142.5	152.8	146.8	151.2	154.2		
16 Chg@	4.1	2.5	4.9	5.9	9.9	3.7	0.1	5.0	7.0	7.2	-3.9	3.0	2.0		
17 Privilege Tax*	69.3	94.1	109.0	125.6	123.8	139.9	150.7	171.0	191.9	186.6	190.1	207.9	240.0		
18 Chg@	-8.6	35.7	15.8	15.3	-1.4	12.9	7.8	13.4	12.2	-2.8	1.9	9.4	15.5		
19 All Other Taxes*	253.3	252.5	269.4	236.4	277.3	303.7	296.8	361.8	335.9	346.9	347.7	359.9	471.9		
20 Chg@	7.7	-0.3	6.7	-12.3	17.3	9.5	-2.3	21.9	-7.2	3.3	0.2	3.5	31.1		

**Table 10. Prospects for Tax Revenue: MTSU Forecast**

	Actual												Estimated		
	FY90-91	FY91-92	FY92-93	FY93-94	FY94-95	FY95-96	FY96-97	FY97-98	FY98-99	FY99-00	FY00-01	FY01-02	FY02-03	FY03-04	FY04-05
<b>Economic Assumptions</b>															
<b>(Fiscal-Year Basis)</b>															
1 Personal Income (Bil \$)	84.4	90.3	97.4	103.3	111.1	116.6	122.3	129.8	136.9	143.6	152.1	157.3	164.1	171.9	180.9
2 Chg@	6.1	6.9	8.0	6.0	7.5	5.0	4.8	6.2	5.4	4.9	6.0	3.4	4.3	4.7	5.2
3 Nonagricultural															
Employments (Mil)	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7
4 Chg@	0.0	1.2	3.5	3.8	3.9	2.2	1.4	2.1	1.9	2.1	0.7	-0.9	-0.2	0.6	1.1
5 Income Per Employee															
(Th \$)	38.7	40.9	42.6	43.5	45.0	46.3	47.8	49.7	51.5	52.9	55.6	58.1	60.7	63.2	65.8
6 Chg@	6.3	5.7	4.3	2.2	3.4	2.7	3.4	4.0	3.5	2.8	5.2	4.4	4.5	4.2	4.1
7 Retail Sales (Bil \$)	33.7	35.2	37.6	40.7	44.5	46.8	48.3	53.5	58.8	62.6	64.0	66.1	69.0	72.2	75.5
8 Chg@	1.2	4.5	6.8	8.3	9.3	5.3	3.1	10.8	9.9	6.5	2.4	3.3	4.3	4.6	4.6
9 Building Permits															
(Th of Units)	0.0	0.0	26.4	30.1	27.6	31.3	29.2	29.4	31.2	29.7	26.3	28.0	30.7	29.2	27.5
10 Chg@	0.0	0.0	0.0	13.8	-8.2	13.5	-6.8	0.7	5.9	-4.8	-11.4	6.4	9.6	-4.9	-5.8
<b>Revenue Forecasts</b>															
11 Total Revenue*	4,215.6	4,431.4	5,441.5	5,505.5	5,767.1	6,071.7	6,415.1	6,791.0	7,030.3	7,558.5	7,636.3	7,508.6	8,446.0	8,749.2	9,095.1
12 Chg@	1.0	5.1	22.8	1.2	4.8	5.3	5.7	5.9	3.5	7.5	1.0	-1.7	12.5	3.6	4.0
13 Sales and Use*	2,354.3	2,540.7	3,444.2	3,370.2	3,477.0	3,673.8	3,906.7	4,102.7	4,337.3	4,608.3	4,642.7	4,654.7	5,377.6	5,587.6	5,828.0
14 Chg@	0.8	7.9	35.6	-2.1	3.2	5.7	6.3	5.0	5.7	6.2	0.7	0.3	15.5	3.9	4.3
15 Income*	97.0	93.2	95.0	100.3	101.3	114.5	128.9	160.4	160.6	180.2	198.6	144.5	150.3	156.9	165.0
16 Chg@	-5.8	-4.0	1.9	5.6	1.0	13.0	12.6	24.5	0.1	12.2	10.2	-27.2	4.0	4.4	5.2
17 Gross Receipts*	163.4	166.1	166.7	165.6	180.6	175.9	189.0	188.4	199.3	213.5	216.8	223.9	230.8	237.3	244.0
18 Chg@	2.0	1.6	0.3	-0.7	9.0	-2.6	7.4	-0.3	5.8	7.1	1.5	3.3	3.1	2.8	2.8
19 Excise plus Franchise*	550.0	532.8	605.5	677.9	777.0	816.1	888.5	913.8	893.4	1,074.3	1,112.1	968.4	1,013.0	1,064.6	1,117.0
20 Chg@	4.6	-3.1	13.6	12.0	14.6	5.0	8.9	2.8	-2.2	20.3	3.5	-12.9	4.6	5.1	4.9
21 Gasoline Tax*	489.3	504.7	491.0	552.6	528.3	535.9	543.3	563.2	567.9	576.6	569.4	576.9	579.4	585.9	595.1
22 Chg@	-1.8	3.2	-2.7	12.6	-4.4	1.4	1.4	3.7	0.8	1.5	-1.3	1.3	0.4	1.1	1.6
23 Vehicle Registration*	141.3	147.2	155.8	165.6	179.5	185.2	184.2	196.5	201.5	219.3	212.1	221.2	231.2	231.3	233.0
24 Chg@	-3.1	4.2	5.9	6.3	8.4	3.1	-0.5	6.6	2.6	8.8	-3.3	4.3	4.5	0.0	0.7
25 Fuel Tax*	97.7	100.1	105.0	111.2	122.2	126.7	126.8	133.2	142.5	152.8	146.8	151.2	157.4	159.8	164.1
26 Chg@	4.1	2.5	4.9	5.9	9.9	3.7	0.1	5.0	7.0	7.2	-3.9	3.0	4.1	1.5	2.6
27 Privilege Tax*	69.3	94.1	109.0	125.6	123.8	139.9	150.7	171.0	191.9	186.6	190.1	207.9	235.5	239.5	245.6
28 Chg@	-8.6	35.7	15.8	15.3	-1.4	12.9	7.8	13.4	12.2	-2.8	1.9	9.4	13.3	1.7	2.6
29 All Other Taxes*	253.3	252.5	269.4	236.4	277.3	303.7	296.8	361.8	335.9	346.9	347.7	359.9	470.9	486.5	503.3
30 Chg@	7.7	-0.3	6.7	-12.3	17.3	9.5	-2.3	21.9	-7.2	3.3	0.2	3.5	30.9	3.3	3.5

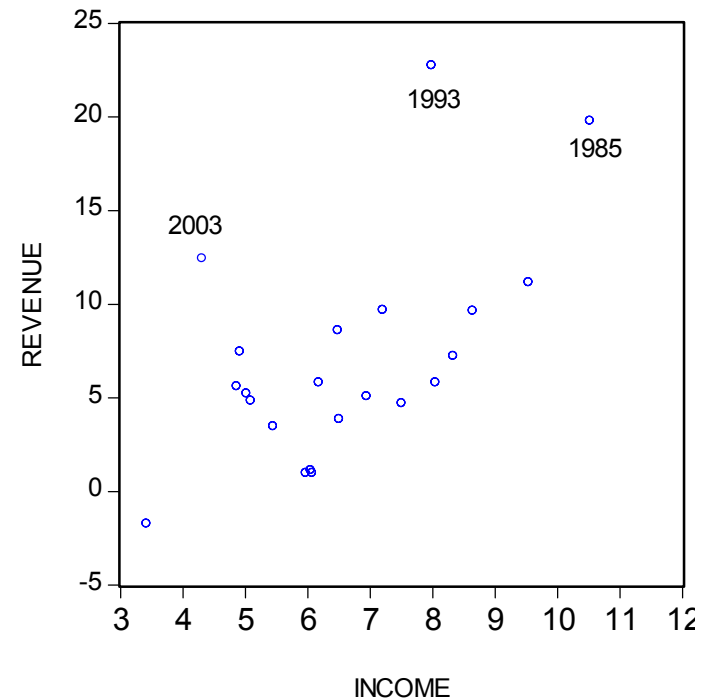
Notes: \* Millions of dollars; @ annual percent change. Annual economic data in lines 1, 3, 5, 7, and 9 of Table 10 are calculated in terms of fiscal years ending in IIQ of the calendar year of the noted fiscal year.

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# A Consistency Check

Top-down forecasting model projects growth in tax revenue based on personal income growth, controlling for tax rate changes in 1985 and 1993

Based on personal income projections, the consistency check is below



	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Personal Income Growth	4.9	6.0	3.4	4.3	4.7	5.2
Revenue Growth	7.5	1.0	-1.7	12.2	2.9	3.6
Revenue (Millions of \$)	7558.5	7636.3	7508.6	8423.9	8665.9	8977.6



# Contingency View

## *A Double-Dip Recession*

*Balance of economic forces noted earlier are entirely on the down side*

- War-related economic paralysis
- Lack of corporate pricing power
- Risk of deflation
- Earnings doldrums persist with weak value in defined-benefit pensions
- Problems in re-insurance
- Housing activity and vehicle sales vulnerable to retrenchment
- Equity prices drag down spending

*Risk scenario: double-dip recession*

- Second downturn begins early next year and continues into FY 2004 (Fall and Winter of 2003/04)
- Growth emerges during second latter part of FY 2004 (Spring 200)
- Weakness spills over into early FY 2005 (Fall 2004 and Winter 2004/05)

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Personal Income Growth	4.9	6.0	3.4	2.5	1.7	4.2
Revenue Growth	7.5	1.0	-1.7	10.4	-0.1	2.6
Revenue (Millions of \$)	7558.5	7636.3	7508.6	8292.5	8282.0	8497.0